<u>RAW SEQUENCE LISTING</u>

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _____ 10/549, 796 A

Source: _____ TFWO

Date Processed by STIC: _____ 9/1/2006

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: __10/549,796 A__   CRF Edit Date: __9/1/2006__

Edited by: __DA__

____ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

____ Corrected the SEQ ID NO. Sequence numbers edited were:

_____

____ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

_____

__/__ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

____ Inserted mandatory headings/numeric identifiers, specifically:

_____

____ Moved responses to same line as heading/numeric identifier, specifically:

_____

____ Other:

_____
_____
_____

Revised 09/09/2003

IFWO

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/549,796A

DATE: 09/01/2006
TIME: 12:54:50

Input Set : N:\DA\pto.da.txt
Output Set: N:\CRF4\09012006\J549796A.raw

```
 3 <110> APPLICANT: Enobia Pharma Inc.
 4        Guy Boileau
 5        Adriana Karaoglanovic Carmona
 6        Marcelo Campos
 7        Maria Aparecida Juliano
 8        Luiz Juliano
10 <120> TITLE OF INVENTION: PHEX SUBSTRATES AND METHODS USING SAME
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W--> `11 <130> FILE REFERENCE: 12987.54`
C--> `13 <140> CURRENT APPLICATION NUMBER: US/10/549,796A`
C--> `14 <141> CURRENT FILING DATE: 2005-09-19`
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16 <160> NUMBER OF SEQ ID NOS: 32
18 <170> SOFTWARE: PatentIn version 3.2
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21 <211> LENGTH: 7
22 <212> TYPE: PRT
23 <213> ORGANISM: Artificial
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Synthetic Construct
28 <400> SEQUENCE: 1
30 Ala Trp Leu Asp Ser Gly Val
31 1               5
34 <210> SEQ ID NO: 2
35 <211> LENGTH: 4
36 <212> TYPE: PRT
37 <213> ORGANISM: Artificial
39 <220> FEATURE:
40 <223> OTHER INFORMATION: Synthetic Construct
42 <400> SEQUENCE: 2
44 Phe Ser Asp Tyr
45 1
48 <210> SEQ ID NO: 3
49 <211> LENGTH: 6
50 <212> TYPE: PRT
51 <213> ORGANISM: Artificial
53 <220> FEATURE:
54 <223> OTHER INFORMATION: Synthetic Construct
56 <400> SEQUENCE: 3
58 Gly Phe Ser Asp Tyr Lys
59 1               5
62 <210> SEQ ID NO: 4
63 <211> LENGTH: 6
64 <212> TYPE: PRT
65 <213> ORGANISM: Artificial
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RAW SEQUENCE LISTING   DATE: 09/01/2006
PATENT APPLICATION: US/10/549,796A   TIME: 12:54:50

Input Set : **N:\DA\pto.da.txt**
Output Set: **N:\CRF4\09012006\J549796A.raw**

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     68 <223> OTHER INFORMATION: Synthetic Construct
     71 <220> FEATURE:
     72 <221> NAME/KEY: misc_feature
     73 <222> LOCATION: (2)..(5)
     74 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except cysteine
     77 <400> SEQUENCE: 4
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     80 1                   5
     83 <210> SEQ ID NO: 5
     84 <211> LENGTH: 6
     85 <212> TYPE: PRT
     86 <213> ORGANISM: Artificial
     88 <220> FEATURE:
     89 <223> OTHER INFORMATION: Synthetic Construct
     92 <220> FEATURE:
     93 <221> NAME/KEY: MISC_FEATURE
     94 <222> LOCATION: (2)..(3)
     95 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine,
     96         aspartate and glutamate
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     99 <221> NAME/KEY: MISC_FEATURE
    100 <222> LOCATION: (5)..(5)
    101 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine
    103 <400> SEQUENCE: 5
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    106 1                   5
    109 <210> SEQ ID NO: 6
    110 <211> LENGTH: 6
    111 <212> TYPE: PRT
    112 <213> ORGANISM: Artificial
    114 <220> FEATURE:
    115 <223> OTHER INFORMATION: Synthetic Construct
    118 <220> FEATURE:
    119 <221> NAME/KEY: MISC_FEATURE
    120 <222> LOCATION: (2)..(2)
    121 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine,
    122         aspartate and glutamate
    124 <220> FEATURE:
    125 <221> NAME/KEY: MISC_FEATURE
    126 <222> LOCATION: (3)..(3)
    127 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine
    129 <220> FEATURE:
    130 <221> NAME/KEY: MISC_FEATURE
    131 <222> LOCATION: (5)..(5)
    132 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine,
    133         aspartate and glutamate
    135 <400> SEQUENCE: 6
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W--> 137 Gly Xaa Xaa Asp Xaa Lys

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138 1                   5
141 <210> SEQ ID NO: 7
142 <211> LENGTH: 6
143 <212> TYPE: PRT
144 <213> ORGANISM: Artificial
146 <220> FEATURE:
147 <223> OTHER INFORMATION: Synthetic Construct
150 <220> FEATURE:
151 <221> NAME/KEY: MISC_FEATURE
152 <222> LOCATION: (2)..(2)
153 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine
155 <220> FEATURE:
156 <221> NAME/KEY: MISC_FEATURE
157 <222> LOCATION: (3)..(3)
158 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine,
159       aspartate and glutamate
161 <220> FEATURE:
162 <221> NAME/KEY: MISC_FEATURE
163 <222> LOCATION: (5)..(5)
164 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid except
cysteine,
165       aspartate and glutamate
167 <400> SEQUENCE: 7
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170 1                   5
173 <210> SEQ ID NO: 8
174 <211> LENGTH: 4
175 <212> TYPE: PRT
176 <213> ORGANISM: Artificial
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Synthetic Construct
181 <400> SEQUENCE: 8
183 Asp Arg Arg Leu
184 1
187 <210> SEQ ID NO: 9
188 <211> LENGTH: 4
189 <212> TYPE: PRT
190 <213> ORGANISM: Artificial
192 <220> FEATURE:
193 <223> OTHER INFORMATION: Synthetic Construct
195 <400> SEQUENCE: 9
197 Arg His Thr Arg
198 1
201 <210> SEQ ID NO: 10
202 <211> LENGTH: 6
203 <212> TYPE: PRT
204 <213> ORGANISM: Artificial
206 <220> FEATURE:
207 <223> OTHER INFORMATION: Synthetic Construct
210 <220> FEATURE:
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211 <221> NAME/KEY: misc_feature
212 <222> LOCATION: (2)..(3)
213 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
215 <220> FEATURE:
216 <221> NAME/KEY: misc_feature
217 <222> LOCATION: (5)..(5)
218 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
220 <400> SEQUENCE: 10
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223 1                   5
226 <210> SEQ ID NO: 11
227 <211> LENGTH: 6
228 <212> TYPE: PRT
229 <213> ORGANISM: Artificial
231 <220> FEATURE:
232 <223> OTHER INFORMATION: Synthetic Construct
235 <220> FEATURE:
236 <221> NAME/KEY: misc_feature
237 <222> LOCATION: (2)..(3)
238 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
240 <220> FEATURE:
241 <221> NAME/KEY: misc_feature
242 <222> LOCATION: (5)..(5)
243 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
245 <400> SEQUENCE: 11
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W--> 247 **Gly Xaa Xaa Glu Xaa Lys**
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248 1                   5
251 <210> SEQ ID NO: 12
252 <211> LENGTH: 6
253 <212> TYPE: PRT
254 <213> ORGANISM: Artificial
256 <220> FEATURE:
257 <223> OTHER INFORMATION: Synthetic Construct
259 <400> SEQUENCE: 12
261 Gly Phe Ser Glu Tyr Lys
262 1                   5
265 <210> SEQ ID NO: 13
266 <211> LENGTH: 6
267 <212> TYPE: PRT
268 <213> ORGANISM: Artificial
270 <220> FEATURE:
271 <223> OTHER INFORMATION: Synthetic Construct
273 <400> SEQUENCE: 13
275 Gly Phe Ser Asp Tyr Gln
276 1                   5
279 <210> SEQ ID NO: 14
280 <211> LENGTH: 9
281 <212> TYPE: PRT
282 <213> ORGANISM: Artificial
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RAW SEQUENCE LISTING   DATE: 09/01/2006
PATENT APPLICATION: US/10/549,796A   TIME: 12:54:50

        Input Set : **N:\DA\pto.da.txt**
        Output Set: **N:\CRF4\09012006\J549796A.raw**

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284 <220> FEATURE:
285 <223> OTHER INFORMATION: Synthetic Construct
287 <400> SEQUENCE: 14
289 Asp His Leu Ser Asp Thr Ser Thr Gln
290 1               5
293 <210> SEQ ID NO: 15
294 <211> LENGTH: 7
295 <212> TYPE: PRT
296 <213> ORGANISM: Artificial
298 <220> FEATURE:
299 <223> OTHER INFORMATION: Synthetic Construct
301 <400> SEQUENCE: 15
303 Leu Glu Leu Asp Ser Arg Gln
304 1               5
307 <210> SEQ ID NO: 16
308 <211> LENGTH: 8
309 <212> TYPE: PRT
310 <213> ORGANISM: Artificial
312 <220> FEATURE:
313 <223> OTHER INFORMATION: Synthetic Construct
315 <400> SEQUENCE: 16
317 Ala Trp Leu Asp Ser Gly Val Gln
318 1               5
321 <210> SEQ ID NO: 17
322 <211> LENGTH: 14
323 <212> TYPE: PRT
324 <213> ORGANISM: Artificial
326 <220> FEATURE:
327 <223> OTHER INFORMATION: Synthetic Construct
329 <400> SEQUENCE: 17
331 Arg Arg His Thr Arg Ser Ala Glu Asp Asp Ser Glu Arg Gln
332 1               5                   10
335 <210> SEQ ID NO: 18
336 <211> LENGTH: 8
337 <212> TYPE: PRT
338 <213> ORGANISM: Artificial
340 <220> FEATURE:
341 <223> OTHER INFORMATION: Synthetic Construct
343 <400> SEQUENCE: 18
345 Leu Met Met Asp Phe Arg Gly Gln
346 1               5
349 <210> SEQ ID NO: 19
350 <211> LENGTH: 8
351 <212> TYPE: PRT
352 <213> ORGANISM: Artificial
354 <220> FEATURE:
355 <223> OTHER INFORMATION: Synthetic Construct
357 <400> SEQUENCE: 19
359 Ser Ala Glu Asp Asn Ser Pro Gln
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/01/2006
PATENT APPLICATION: US/10/549,796A   TIME: 12:54:51

Input Set : **N:\DA\pto.da.txt**
Output Set: **N:\CRF4\09012006\J549796A.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 2,3,4,5
Seq#:5; Xaa Pos. 2,3,5
Seq#:6; Xaa Pos. 2,3,5
Seq#:7; Xaa Pos. 2,3,5
Seq#:10; Xaa Pos. 2,3,5
Seq#:11; Xaa Pos. 2,3,5

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
Seq#:28,29,30,31,32

VERIFICATION SUMMARY   DATE: 09/01/2006
PATENT APPLICATION: US/10/549,796A   TIME: 12:54:51

Input Set : **N:\DA\pto.da.txt**
Output Set: **N:\CRF4\09012006\J549796A.raw**

L:11 M:283 W: Missing Blank Line separator, <130> field identifier
L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:222 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0

**Raw Sequence Listing before editing,
for reference only**

IFWO

RAW SEQUENCE LISTING   DATE: 08/31/2006
PATENT APPLICATION: US/10/549,796A   TIME: 09:00:49

Input Set : F:\Sequence Listing.txt
Output Set: N:\CRF4\08312006\J549796A.raw

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     3 <110> APPLICANT: Enobia Pharma Inc.
     4        Guy Boileau
     5        Adriana Karaoglanovic Carmona
     6        Marcelo Campos
     7        Maria Aparecida Juliano
     8        Luiz Juliano
    10 <120> TITLE OF INVENTION: PHEX SUBSTRATES AND METHODS USING SAME
W--> 11 <130> FILE REFERENCE: 12987.54
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/549,796A
C--> 14 <141> CURRENT FILING DATE: 2005-09-19
    16 <160> NUMBER OF SEQ ID NOS: 32
    18 <170> SOFTWARE: PatentIn version 3.2
```

Does Not Comply
Corrected Diskette Needed

CPS-1)

ERRORED SEQUENCES

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   531 <210> SEQ ID NO: 32
   532 <211> LENGTH: 6
   533 <212> TYPE: PRT
   534 <213> ORGANISM: Artificial
   536 <220> FEATURE:
   537 <223> OTHER INFORMATION: Synthetic Construct
   539 <400> SEQUENCE: 32
   541 Gly Phe Arg Asp Trp Lys
   542 1               5
E-->545 2
E-->548 2
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deleted

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 08/31/2006
PATENT APPLICATION: US/10/549,796A   TIME: 09:00:50

Input Set : **F:\Sequence Listing.txt**
Output Set: **N:\CRF4\08312006\J549796A.raw**

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
Seq#:28,29,30,31,32

VERIFICATION SUMMARY   DATE: 08/31/2006
PATENT APPLICATION: US/10/549,796A   TIME: 09:00:50

Input Set : **F:\Sequence Listing.txt**
Output Set: **N:\CRF4\08312006\J549796A.raw**

```
L:11 M:283 W: Missing Blank Line separator, <130> field identifier
L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:105 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:222 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:545 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:32
M:332 Repeated in SeqNo=32
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